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Nasty Weather Gear

~ Mark Baldwin

This is a report on two bits of nasty weather riding gear, and on the whole it is happily positive.

WIRELESS VEST

The first product is the exo² StormRider heated vest, which has one big unique feature that makes it outstanding. The second are the increasingly popular Muck Boots, used as riding boots.

The weather and the rides behind this report? Rides included a bunch of six-mile round trips to work, a dozen or more 20-mile round trips to the nearest town big enough for a stop light and gas station, one 40-mile ride, one 100-mile round trip, and two 200-mile round trips from this part of the coast to Augusta, Maine. That's all I could manage in the miserable '07-08 winter. Since then I've worn it often in weather that was simply cool. I've used the exo²



vest plugged in and not plugged in. It feels so good, on a mild rainy day, to be a little too warm in the belly.

The coldest ride was 20 miles in about 14° Fahrenheit. The most uncomfortable was the return leg of a 200 mile trip. The ride out was entirely OK, a little below freezing and sunny. The ride back was in the mid to high 30s, in rain and spitting sleet. Most of the rides were in the twenties and low thirties.

All the rides were on a BMW F650 Dakar with heated grips and hand guards. Besides the vest and boots, the other clothes ranged from only jeans, to jeans with long johns, to jeans, long johns, and Aerostitch riding pants. Usually I wore a sweater, and always a wool scarf. Sometimes, but not always, there was a liner in my Roadgear jacket. Gloves were usually heavy uninsulated leather, so I could feel some of the heat from the grips. On the longer rides I used a neoprene over-the-nose face mask or a balaclava hat inside my helmet.

I ordered my exo² vest from Scotland last fall. It was pricey, especially with the bent dollar, but after a few rides I thought it was a bargain. Now you can order it shipped from the Atlanta, GA for less money and free freight within the U.S, more on which later.

The big feature of the exo² vest is that it uses a wireless fabric, which the company calls FabRoc™. There are no wires in the fabric; the heat panel itself gets warm. The heating layer is sandwiched between a breeze-proof outer layer and a soft liner. It's all very clothing-like, with the big advantage of uniform heat, and no worry about balling the thing up and stuffing it wherever. exo² also makes heated gloves, inner soles, and other gear.

The company gives this description of the material:

“The FabRoc™ technology centers around a core unique polymer based element that heats up when low voltage is passed through it. It can be powered by either rechargeable batteries, direct connection to the bike battery or from the accessory socket of a car or motorcycle. By regulating the voltage applied, the heating element heats up to a pre-defined temperature creating a uniform area of heat with no hot spots or possibility for overheating. Uniform distribution and dissipation of heat allows the heating element to be located in close proximity of the area to be heated, thus maximizing the generated heat and minimizing heating response time.

“Loading the polymer with conductive particles enhances its conductivity properties and results in the element exhibiting a positive temperature coefficient (PTC) when heated.

“PTC is a characteristic FabRoc™ exhibits whereby resistance increases with temperature in a non-linear fashion. Therefore, once the material reaches the manufactured temperature, it self regulates and reduces the draw on the power source. An optional universal controller allows the user to select temperature settings if desired.”

Because of Yankee Beemers' reputation as techno geeks, I'll continue quoting the company:

“When the heating element is at room ambient temperature, numerous conductive ‘chains’ exist within the material. When low voltage is applied, current flows through the device, causing a rise in heat. As the heat rises, it creates expansion, causing the conductive particles to move apart from each other. As the resistance of the element increases, the material conducts less current and temperature is regulated.”

What’s it all mean? My belly, back, and chest stayed operational through some prolonged cold. Sometimes I felt like I was standing next to a wood stove. Other times I simply had a pronounced lack of misery, considering the buffeting that other parts of me were enduring. There were times when the unplugged vest did the trick, but if I got too cold, I got toasty quickly when I plugged the thing back in. (Note, be sure to say you need a BMW plug when you order the vest.)

Are there any downsides? The StormRider is so well made that I assume that all the choices were well thought out.

It does not have a collar. I found that a scarf worked well enough.

I wondered if the design would be improved by using one of those magnetic electrical plugs, like on new MacIntosh computers and, I hear, some toasters. This would be a benefit to dimwits who step away from the bike while still attached, but there may be other disadvantages. I put a wire tie on the bike end of the power cord, so I wouldn’t do any damage if I gave it a tug.

The zipper slider is on the left side (in traditional European fashion), but I figure if I swagger enough people won’t know that my vest opens like a girl’s. The zipper got jammed beyond my ability to free it, and exo² said they would put it right – but a woman who works for me got it working smoothly.

North American riders can now buy the exo² StormRider, and other accessories, through www.theheatinside.com.



Prices: The StormRider vest is \$240. There is a StormWalker vest for \$150 which, as I understand it, heats only the lower back and kidneys (and has heated pockets). You’ll find specs and prices for all the products on the site.

They are a pleasure to deal with.

MUCK AND BOOTIES

I’ve never owned proper motorcycle boots. Over the decades I’ve worn high top sneakers and combat boots, Red

Wing engineer boots, and, lately, leather and goretex hiking boots with ankle padding, with gaters in the wet. Then, last winter, I had a Eureka moment! How about good old Muck Boots? They're not thick leather, but they're made of neoprene which is padding, right? And they're warm and waterproof.

So here is a brief personal account, totally devoid of engineering knowhow.

I wore two different kinds of Muck boots through some awfully cold and sloppy stuff. One was the 15" "Wetland." The other was the 15" "Tack boot." In the very coldest weather I could feel that it was cold, but the wind chill was what? Minus 30°?

The big difference between those two models is that the Wetland, and many other models, have a heavy sole which makes it hard-to-impossible to get your toe under the shifter. You have to grab it with the side of the boot, which works OK. The Tack boot is much thinner, and slips nicely under the shifter. I've also worn the Tack boot in a 60° rain storm, and my feet were not too hot.

The 15" high boot slips on and off, hands free.

The neoprene feels like it offers a certain amount of padding. I talked with a Muck Boot Company executive and technical expert, and he went out of his way to say that the vulcanized coating is not made for extreme scuffing. Muck also now makes leather boots, which I did not try, but if they are as warm and dry as non-leather Muck Boots, they sound like an improvement on other boots not specifically made for riding.

A Muck Boot salesman who rides in Canada strongly suggests the NEOS Villager over-boot, which Muck sells, worn over a sturdy non-waterproof boot. NEOS makes a variety of heavier and lighter, taller and shorter waterproof over-boots. The Villager is on the light side but is rugged enough and packs easily. I used a pair in a frog-strangler of a rain, and though my shoulders were soaked from rain seeping down my neck, and my leather gloves were saturated to the point of sliminess, my socks were dry.

As I write this, the sky is blue, the trees are green, and I know that it will be nice and warm in Maine, until a cloud wanders by.

Mark Baldwin lives in Surry, Maine